

Notice of Allowability

Application No.

09/853,395

Examiner

Minh Dieu Nguyen

Applicant(s)

STRONGIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/20/2006.
2. ☒ The allowed claim(s) is/are 1-3, 5, 8-17, 20, 22, 25-28, 32, 59, 61, 64-67 and 71.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark W. Sincell on 1/9/2007.

2. The application has been amended as follows:

In claim 1, the paragraph

"A system, comprising:

a crypto-processor;

a memory coupled to receive memory transactions through the crypto-processor, wherein the memory transactions are passed to the memory by the crypto-processor;

and

a device different from the crypto-processor, wherein the device is configured to request the memory transactions passed to the memory by the crypto-processor."

has been changed to

--A system, comprising:

a crypto-processor;

a memory coupled to receive memory transactions through the crypto-processor, wherein the memory transactions are passed to the memory by the crypto-processor;

a device different from the crypto-processor, wherein the device is configured to request the memory transactions passed to the memory by the crypto-processor;

wherein the crypto-processor includes a secret; and wherein the crypto-processor is configured to demand an authorization before passing memory access to the memory, wherein the authorization comprises an indication from the device that knows the secret, wherein the indication of the secret comprises a correct response to a challenge-response authentication.—

In claim 6, the paragraph

“(Currently Amended)”

has been changed to

--Canceled—

In claim 7, the paragraph

“(Original)”

has been changed to

--Canceled—

In claim 20, the paragraph

“A method of operating a computer system, the computer system including a crypto-processor, a device different from the crypto-processor, and a storage device, the method comprising:

transmitting a request for a memory transaction for a storage location in the storage device, wherein transmitting the request for the memory transaction for the storage location in the storage device comprises the device initiating the request for the memory transaction for the storage location in the storage device;

receiving the request for the memory transaction at the crypto-processor;

determining if the memory transaction is authorized for the storage location;

passing the request for the memory transaction to the storage device if the memory transaction is authorized for the storage location."

has been changed to

--A method of operating a computer system, the computer system including a crypto-processor, a device different from the crypto-processor, and a storage device, the method comprising:

transmitting a request for a memory transaction for a storage location in the storage device, wherein transmitting the request for the memory transaction for the storage location in the storage device comprises the device initiating the request for the memory transaction for the storage location in the storage device;

receiving the request for the memory transaction at the crypto-processor;

determining if the memory transaction is authorized for the storage location;

passing the request for the memory transaction to the storage device if the memory transaction is authorized for the storage location, wherein passing the request for the memory transaction to the storage device if the memory transaction is authorized

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for the storage location comprises passing the request for the memory transaction to the storage device only if the memory transaction is authorized for the storage location;

wherein the crypto-processor includes a secret; and wherein determining if the memory transaction is authorized for the storage location comprises demanding an authorization from the device initiating the request, wherein the authorization comprises an indication from the device that knows the secret;

wherein the indication of the secret comprises a correct response to a challenge-response authentication; and wherein demanding an authorization from the device initiating the request comprises providing a challenge to the device, and the device providing the correct response to the challenge.—

In claim 21, the paragraph

“(Original)”

has been changed to

--Canceled--

In claim 25,

“(Original) The method of claim 21,”

has been changed to

--(Currently amended) The method of claim 20,--

In claim 30, the paragraph

“(Original)”

has been changed to

--Canceled--

In claim 31, the paragraph

“(Original)”

has been changed to

--Canceled--

In claim 32,

“(Original) The method of claim 31”

has been changed to

--(Currently amended) The method of claim 20,--

In claim 59, the paragraph

“A computer readable program storage device encoded with instructions that, when executed by a computer system including a crypto-processor, a device different that the crypto-processor, and a storage device, performs a method of operating the computer system, the method comprising:

transmitting a request for a memory transaction for a storage location in the storage device, wherein transmitting the request for the memory transaction for the

storage location in the storage device comprises the device initiating the request for the memory transaction for the storage location in the storage device;

receiving the request for the memory transaction at the crypto-processor;

determining if the memory transaction is authorized for the storage location;

passing the request for the memory transaction to the storage device if the memory transaction is authorized for the storage location.”

has been changed to

-- A computer readable program storage device encoded with instructions that, when executed by a computer system including a crypto-processor, a device different from the crypto-processor, and a storage device, performs a method of operating the computer system, the method comprising:

transmitting a request for a memory transaction for a storage location in the storage device, wherein transmitting the request for the memory transaction for the storage location in the storage device comprises the device initiating the request for the memory transaction for the storage location in the storage device;

receiving the request for the memory transaction at the crypto-processor;

determining if the memory transaction is authorized for the storage location;

passing the request for the memory transaction to the storage device if the memory transaction is authorized for the storage location, wherein passing the request for the memory transaction to the storage device if the memory transaction is authorized for the storage location comprises passing the request for the memory transaction to the storage device only if the memory transaction is authorized for the storage location;

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wherein the crypto-processor includes a secret; and wherein determining if the memory transaction is authorized for the storage location comprises demanding an authorization from the device initiating the request, wherein the authorization comprises an indication from the device that knows the secret;

wherein the indication of the secret comprises a correct response to a challenge-response authentication; and wherein demanding an authorization from the device initiating the request comprises providing a challenge to the device, and the device providing the correct response to the challenge.—

In claim 60, the paragraph

“(Original)”

has been changed to

--Canceled--

In claim 64,

“(Original) The computer readable program storage device of claim 60,”

has been changed to

--(Currently amended) The computer readable program storage device of claim 59,--

In claim 69, the paragraph

“(Original)”

has been changed to

--Canceled--

In claim 70, the paragraph

"(Original)"

has been changed to

--Canceled--

In claim 71,

"(Original) The computer readable program storage device of claim 70,"

has been changed to

--(Currently amended) The computer readable program storage device of claim 59,--

Allowable Subject Matter

3. Claims 1-3, 4, 8-17, 20, 22, 25-28, 32, 59, 61, 64-67 and 71 are allowed.

4. The following is an examiner's statement of reasons for allowance:

In light of the specification, the present invention is directed to a method and system for enhanced security and manageability for PC BIOS ROM and other secure storage. Each independent claim (claim 1, 20 and 59) identifies the uniquely distinct features of the computer system includes a requesting device, a storage device and a security device, with the requesting device operably coupled to the storage device

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through the security device; receiving a transaction request for a storage location associated with the storage device from the requesting device, determining if the requesting device is authorized to access the storage device wherein determining if the requesting device is authorized to access the storage device may include providing a challenge in response to receiving the transaction request, receiving a response to the challenge and determining if the response to the challenge is equal to an expected response. The closest prior arts, Davis (5,844,986), Bress et al. (6,813,682), Brant et al. (5,848,435) and Baird, III et al. (6,732,278) fail to anticipate or render the above limitations obvious.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


mdh
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